This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of dynamically adjusting database performance in a computer system, the method comprising:

receiving a request for a temporary allocation of a system resource for a database query to be executed in the future, wherein the request is based upon a desired resource allocation determined in association with generating an access plan for the database query; and

dynamically and temporarily adjusting resource allocation in the computer system in response to receiving the request such that the database query is executed under the adjusted resource allocation.

2. (Original) The method of claim 1, wherein receiving the request and dynamically and temporarily adjusting resource allocation is performed by a performance adjuster that periodically adjusts resource allocation in the computer system.

3. (Original) The method of claim 1, wherein the system resource is selected from the group consisting of a memory resource, a processor resource, an input/output resource, a storage resource, and a machine resource.

4. (Original) The method of claim 1, wherein the database query is allocated to a memory pool in the computer system, wherein the request specifies at least one adjusted parameter for the memory pool, and wherein dynamically and temporarily adjusting resource allocation includes adjusting the memory pool based upon the specified at least one adjusted parameter.

5. (Original) The method of claim 4, wherein the adjusted parameter specifies a reduction in maximum activity permitted in the memory pool, and wherein dynamically and temporarily adjusting resource allocation includes reducing maximum activity permitted in the memory pool to that specified in the request.

6. (Original) The method of claim 4, wherein the adjusted parameter specifies additional memory to be allocated to the memory pool, and wherein dynamically and temporarily adjusting resource allocation includes allocating the specified additional memory to the memory pool.

7. (Original) The method of claim 4, wherein the request additionally specifies a duration, and wherein dynamically and temporarily adjusting resource allocation includes readjusting the memory pool after the specified duration.

8. (Original) The method of claim 7, wherein the duration specified in the request identifies a time interval, and wherein readjusting the memory pool after the specified duration includes readjusting the memory pool after the time interval.

9. (Original) The method of claim 7, wherein the duration specified in the request specifies a completion criterion, and wherein readjusting the memory pool after the specified duration includes readjusting the memory pool upon meeting the completion criterion.

10. (Original) The method of claim 4, wherein dynamically and temporarily adjusting resource allocation includes readjusting the memory pool upon completion of execution of the database query.

11. (Original) The method of claim 4, further comprising determining whether to grant the request, wherein dynamically and temporarily adjusting resource allocation is performed only if a determination is made to grant the request.

12. (Original) The method of claim 11, wherein the request additionally specifies a priority, and wherein determining whether to grant the request is based at least in part on the specified priority.

13. (Original) The method of claim 11, wherein determining whether to grant the request is based upon at least one of a current system workload, available memory in the memory pool, a number of current jobs in the memory pool, a number of current threads in the memory pool, and a rate of change of activity in the memory pool.

14. (Original) The method of claim 1, further comprising generating the request using a query optimizer in connection with generating an access plan for the database query.

15. (Original) A method of performing a database query on a computer system, the method comprising:

generating an access plan for the database query, including determining an adjustment to a resource allocation in the computer system that optimizes execution of the access plan;

dynamically and temporarily applying the adjustment to the resource allocation in the computer system; and

executing the access plan while the adjustment to the resource allocation in the computer system is applied.

16. (Original) The method of claim 15, wherein the adjustment to the resource allocation in the computer system comprises allocation of an additional system resource selected from the group consisting of a memory resource, a processor resource, an input/output resource, a storage resource, and a machine resource.

17. (Original) The method of claim 15, wherein generating the access plan is performed by a query optimizer, and wherein dynamically and temporarily applying the adjustment is performed by a performance adjuster that periodically adjusts resource allocation in the computer system.

18. (Original) The method of claim 15, wherein generating the access plan further includes generating a request specifying the adjustment to the resource allocation, and wherein dynamically and temporarily applying the adjustment is performed responsive to the request.

19. (Original) The method of claim 18, wherein the database query is allocated to a memory pool in the computer system, wherein the request specifies at least one adjusted parameter for the memory pool, and wherein dynamically and temporarily applying the

adjustment includes adjusting the memory pool based upon the specified at least one adjusted parameter.

20. (Original) The method of claim 19, wherein the adjusted parameter specifies a reduction in maximum activity permitted in the memory pool, and wherein dynamically and temporarily applying the adjustment includes reducing maximum activity permitted in the memory pool to that specified in the request.

21. (Original) The method of claim 19, wherein the adjusted parameter specifies additional memory to be allocated to the memory pool, and wherein dynamically and temporarily applying the adjustment includes allocating the specified additional memory to the memory pool.

22. (Original) The method of claim 19, wherein the request additionally specifies a duration, and wherein dynamically and temporarily applying the adjustment includes readjusting the memory pool after the specified duration.

23. (Original) The method of claim 19, further comprising determining whether to grant the request, wherein dynamically and temporarily applying the adjustment is performed only if a determination is made to grant the request.

24. (Original) The method of claim 23, wherein the request additionally specifies a priority, and wherein determining whether to grant the request is based at least in part on the specified priority.

25. (Original) The method of claim 23, wherein determining whether to grant the request is based upon at least one of a current system workload, available memory in the memory pool, a number of current jobs in the memory pool, a number of current threads in the memory pool, and a rate of change of activity in the memory pool.

26. (Currently Amended) An apparatus, comprising:

at least one processor;

a memory; and

program code resident in the memory and configured to be executed by the at least one processor to dynamically adjust database performance in the apparatus by receiving a request for a temporary allocation of a system resource for a database query to be executed in the future, and dynamically and temporarily adjusting resource allocation in the apparatus in response to receiving the request such that the database query is executed under the adjusted resource allocation, wherein the request is based upon a desired resource allocation determined in association with generating an access plan for the database query.

27. (Original) The apparatus of claim 26, wherein the program code comprises a performance adjuster configured to periodically adjust resource allocation in the apparatus.

28. (Original) The apparatus of claim 26, further comprising a memory pool, wherein the database query is allocated to the memory pool, wherein the request specifies at least one adjusted parameter for the memory pool, and wherein the program code is configured to dynamically and temporarily adjust resource allocation by adjusting the memory pool based upon the specified at least one adjusted parameter.

29. (Original) The apparatus of claim 28, wherein the adjusted parameter specifies at least one of a reduction in maximum activity permitted in the memory pool and additional memory to be allocated to the memory pool.

30. (Original) The apparatus of claim 28, wherein the request additionally specifies a duration, and wherein the program code is further configured to readjust the memory pool after the specified duration.

31. (Original) The apparatus of claim 28, wherein the program code is further configured to determine whether to grant the request based upon at least one of a priority specified by the request, a current system workload, available memory in the memory pool, a number of current jobs in the memory pool, a number of current threads in the memory pool, and a rate of change of activity in the memory pool.

32. (Original) The apparatus of claim 26, further comprising a query optimizer configured to generate the request in connection with generating an access plan for the database query.

33. (Original) An apparatus, comprising:

at least one processor;

a memory; and

program code resident in the memory and configured to be executed by the at least one processor to determine, in association with generating an access plan for the database query, an adjustment to a resource allocation in the apparatus that optimizes execution of the access plan, to dynamically and temporarily apply the adjustment to the resource allocation, and to execute the access plan while the adjustment to the resource allocation is applied.

34. (Original) The apparatus of claim 33, wherein the program code comprises a query optimizer configured to generate the access plan, and a performance adjuster configured to dynamically and temporarily apply the adjustment to the resource allocation, wherein the performance adjuster is further configured to periodically adjust resource allocation in the apparatus.

35. (Original) The apparatus of claim 33, wherein the program code is further configured to generate a request specifying the adjustment to the resource allocation, and wherein the program code is configured to dynamically and temporarily apply the adjustment responsive to the request.

36. (Original) The apparatus of claim 35, further comprising a memory pool, wherein the database query is allocated to the memory pool, wherein the request specifies at least one adjusted parameter for the memory pool, and wherein the program code is configured to dynamically and temporarily adjust resource allocation by adjusting the memory pool based upon the specified at least one adjusted parameter.

37. (Original) The apparatus of claim 36, wherein the adjusted parameter specifies at least one of a reduction in maximum activity permitted in the memory pool and additional memory to be allocated to the memory pool.

38. (Original) The apparatus of claim 36, wherein the request additionally specifies a duration, and wherein the program code is further configured to readjust the memory pool after the specified duration.

39. (Original) The apparatus of claim 36, wherein the program code is further configured to determine whether to grant the request based upon at least one of a priority specified by the request, a current system workload, available memory in the memory pool, a number of current jobs in the memory pool, a number of current threads in the memory pool, and a rate of change of activity in the memory pool.

40. (Currently Amended) A program product, comprising:

program code configured to dynamically adjust database performance in a computer system by receiving a request for a temporary allocation of a system resource for a database query to be executed in the future, and dynamically and temporarily adjusting resource allocation in the computer system in response to receiving the request such that the database query is executed under the adjusted resource allocation, wherein the request is based upon a desired resource allocation determined in association with generating an access plan for the database query; and

a recordable type computer readable signal bearing medium bearing the program code.

41. (Canceled).

42. (Currently Amended) A program product, comprising:

program code configured to determine, in association with generating an access plan for the database query, an adjustment to a resource allocation in a computer system that optimizes execution of the access plan, to dynamically and

temporarily apply the adjustment to the resource allocation, and to execute the access plan while the adjustment to the resource allocation is applied; and

a recordable type computer readable signal bearing medium bearing the program code.

43. (Canceled).

44. (New) The method of claim 15, wherein generating the access plan for the database query further includes:

generating a plurality of potential access plans;

for each potential access plan, calculating a desired resource allocation, an estimated cost using the desired resource allocation, and an estimated cost using a current resource allocation;

selecting a first minimum cost access plan from among the plurality of potential access plans based upon the estimated costs using the desired resource allocations; and

selecting a second minimum cost access plan from among the plurality of potential access plans based upon the estimated costs using the current resource allocations.

45. (New) The method of claim 44, wherein generating the access plan for the database query further includes:

calculating a cost difference between the first and second minimum cost access plans; and

selecting the first minimum cost access plan for execution in response to the cost difference exceeding a threshold.